

NASH TON TRUCK EXHIBITED AT SHOW

Shares Honors With Famous Quad, That Firemen Now Favor.

Users of trucks, especially those who must have a dependable service in every season of the year, winter as well as summer, will be interested in the Nash one ton truck, equipped with pneumatic tires, on exhibition at the Truck Show.

This truck has gained an enviable reputation throughout the country for its ability to master practically all road difficulties, whether it be pulling through deep sand or driving up steep, slippery hills.

The automatic locking differential with which the Nash one ton truck is equipped is largely responsible for the unusual power imparted to the driving wheels. Added to this mechanical feature is the additional traction contributed by the set of pneumatic tires, which not only take care of the "un-sprung weight" of the truck, but also afford a broader and much more resilient surface with which to grip the road.

Briefly, the automatic locking differential prevents the spinning of either rear wheel no matter what resistance its mate may be encountering and gives the greatest power to the wheel with the greatest traction. On the straightaway the instant one wheel starts to travel faster than the other the differential locks automatically. The drive axle becomes, for all practical purposes, a solid one and the power of the motor is distributed to the wheels in the exact proportion to the traction they are getting.

Thus when one wheel becomes mired or meets a slippery spot the other wheel with traction drives the truck forward.

The pneumatic tires on the Nash one ton truck, in addition to their shock lessening qualities and tractive power, also make, through their resiliency, for more comfortable riding and greatly increased speed. In the transporting of perishable goods and in hurry up cases they prove unusually profitable.

In this connection may be noted the growing use of the famous Nash Quad, equipped with pneumatic tires, as a fire truck in places where reliability and speed are demanded. The Nash Quad is particularly adapted to this kind of work, as well as to other extraordinarily difficult hauling because of its driving and braking on all four wheels.

The Quad is equipped with automatic locking differentials on both front and rear sets of wheels, giving it double efficiency and pulling power. If the front wheels on the Quad get in difficulty the rear wheels push the truck ahead just as the front wheels pull the truck ahead if the rear wheels are in difficulty.

Pneumatic tires on this powerful truck minimize vibration, lessen the shock and contribute a surface gripping action in soft or slippery going.

Both the automatic interlocking differential feature and the pneumatic tire equipment are also very important factors in maintaining the low operation costs of Nash trucks. Spinning and skidding, the two greatest wasters of tires and fuel, are both practically prevented by the automatic locking differential.

The Nash reputation for economy of transportation is likewise instanced in the starting and lighting system on Nash trucks, which, although apart from the above features, conserve fuel in an equally efficient manner. Nash trucks are all equipped with electric lights and starters, which enable them to work at night as well as by day. They also are quick to start and require no cranking on a motor because the driver of a Nash truck shuts off his motor at each stop, realizing that to start it all that is necessary is to press the starter button.

Truck Leader



A. C. BURCH.

"To one small piece of mechanism placed under the hood of every Clydesdale truck must go the credit for the larger part of the phenomenal demand for Clydesdale trucks within the last four years," said A. C. Burch, Mr. Burch is vice-president and general sales manager of the Clydesdale Motor Truck Company, at Clyde, Ohio, and one of the visitors to the Automobile Show.

"This device," continued Mr. Burch, "is known as the Clydesdale controller, and has been aptly termed by Clydesdale owners 'the driver under the hood.'"

"This controller does away with one of the most serious difficulties confronting every owner who does not drive his own truck. This is the tendency of careless or inexperienced drivers to race the engine when decelerating or starting, thus prematurely shortening the life of the truck. The controller does away with this danger, for it absolutely controls the motor at all speeds.

"All that is necessary for the driver to do is to set the throttle for the speed he wishes to maintain. The controller opens or closes the carburetor throttle automatically, depending upon the load and road conditions.

"For instance, suppose your truck is running along at eight miles an hour with the motor making 700 r. p. m. and it slowed down for a crossing. While the brakes are on and the clutch released the controller keeps the engine idling. When the clutch is again engaged the controller automatically opens the throttle and the power of the engine is again exerted to bring the speed up to eight miles an hour within the shortest possible space of time. When that speed is reached the throttle automatically closes as the just enough gas is admitted to keep the truck moving at the predetermined speed.

"The driver can still use the accelerator, which enables him to obtain the required burst of speed in some emergency."

NEAR STEERING WHEEL.
The gear lever and the emergency brake lever on the new series Marmon 14, exhibited at the Grand Central Palace, are located just under the right side of the steering wheel. Your hand is always close to the brake and operates it with second thought. Marmon 14 delivers employ it frequently and not for emergencies only. It is good practice to use the hand brake occasionally instead of the service brake all the time. Then when the tense moment comes—precisely both brakes have been applied and the car obeys, with plenty of clearance from trouble. Brakes and clutch make the car exceedingly easy to handle.

FOUR WHEEL DRIVE BRANCH OPENS HERE

J. H. Cottier and C. P. Mooney Are in Charge in Manhattan.

The Four Wheel Drive Auto Company of Clintonville, Wis., has just opened a completely equipped factory branch at 425 East 149th street, New York city. This step is indicative of the company's consistent policy of progressiveness and its desire to afford F.W.D. owners the best possible service.

The new branch has a personnel of experts in the upkeep of motor trucks, especially F.W.D.s. A large supply of truck parts will be kept on hand for customers occupying territory from Baltimore to New England. From a sales standpoint the New York branch will cover Manhattan only.

The management of this branch is in the hands of J. H. Cottier, formerly Eastern representative of the Kelly Springfield Truck Company. Cooperating with Mr. Cottier is C. P. Mooney, former sales manager of the Chalmers Sales Company, Inc., of New York. Mr. Mooney is sales supervisor for this district.

Mr. Mooney will be assisted by G. S. Reid, formerly salesman in the solid tire division of the Goodrich Tire Company, and by J. P. Darby, formerly First Lieutenant of the United States Army, in charge of the truck unit of Tobyhanna, Pa.

Persons familiar with the war activities of trucks will remember that most of the best known and highly recommended commercial vehicles in the country fell flat under the severe conditions imposed in this mountainous section. Lieut. Darby finally commanded a fleet of F.W.D.s after two leading American made trucks had been rejected for this duty. The problems attending the transportation of 8,000,000 pounds of TNT from the railroad station to the isolated magazines in the Pocono Mountains were so severe that they were ultimately solved only by F.W.D.s. It was necessary for the trucks to make their own trails up the mountains, where even powerful caterpillar tractors failed to come through.

The Four Wheel Drive Auto Company has also appointed C. W. G. Fox distributor for northern New Jersey. His headquarters will be at Newark.

At the same time the territory adjacent to Troy and Albany will be adequately provided for by Cunningham & Pedrick, Troy, N. Y.

The success of the F.W.D. truck under competitive tests of the severest kind, and its many unique features and its ability to meet hauling problems peculiar to the different lines of business would seem to indicate that there is a large potential market in this territory for the famous F.W.D. and that users of commercial vehicles will watch subsequent developments with interest.

The Four Wheel Drive Auto Company have been national advertisers for some time. Their national efforts are now to be supplemented by local newspaper drives.

NASH SIX CARS ON DISPLAY.

Share Attention With New Model Four.

One of the outstanding features of this year's show is the exhibit of the Nash Motors Company, where the curtain is raised on the new Nash four cylinder car. The Nash Six shows chassis in which the working parts of the motor are exposed to view; the Nash sport model and other open and closed six cylinder cars also are on display.

The new Nash Four is strikingly graceful in appearance and in point of construction it is unusually strong. The body design is of streamline type and its proportions are in conformity with the good taste which marks a high degree in the coach builder's art. The motor is clean cut in appearance; it is a high speed perfected valve in head power plant and is said to possess noticeable economy of vibration. This is due in large measure to its inherently counterbalanced crank shaft of unusual size.

Working parts of the Nash Six show chassis are in glass and are exposed to view. The chassis is finished in nickel and it is expected to attract unusual attention. The chassis is supplemented by a Nash five passenger touring car, the Nash sport model, the coupe and the sedan.

Every Repairman Should Visit Booth D-39—4th Floor—Palace

A wholly unique exhibit covering every phase of that aristocrat of the repair field—Automotive Electricity.

Ambu Engineering Institute This is the only school exclusively teaching the theory and practice of starting, lighting, ignition and batteries. It is intensely interesting to the man who wants to better his position or to have a shop of his own.

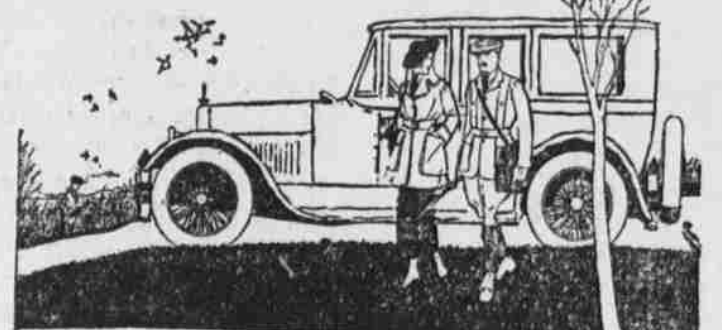
The course covers only 8 weeks of shop, laboratory and class room. Let us tell you about it.

From the AMBU Electrical Trouble Shooter, introduced six years ago, has grown a whole line of battery and electric shop helps, as well as the school. These are shown in one exhibit. It includes Ambu electrical instruments, Ambu appliances and Ambu products.

American Bureau of Engineering

1601-3 S. Michigan Ave. Chicago, Ill.

For Your Cadillac Open Car
New Sedan Bodies



DISTINCTION OF DESIGN FOR THOSE WHO APPRECIATE A "WELL DRESSED CAR" EXACTNESS OF FINISH FOR THE CRITICAL STURDINESS OF CONSTRUCTION FOR COUNTRY AS WELL AS TOWN USE. ABSOLUTE PROTECTION FOR ALL WEATHER.

LeROY M. GROSS

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NEW YORK CITY :: PHONE CIRCLE 4538

He Makes Kings.



ARTEMAS WARD, JR.

From making laws for New York State to making Kings for the world is all in a decade for Artemas Ward, Jr., yet 144 years ago his great-grandfather, Gen. Artemas Ward, was unmaking kings at Bunker Hill.

Of the Harvard class of '39, Mr. Ward's first ambition was Blackstone, and while a member of a prominent New York law firm, he was nominated in the Twenty-fifth district for the New York State Assembly. Elected, he served in the session of 1908, and was reelected for 1909, 1910 and 1911. During his service for the Empire State he was a member of the Judiciary Committee, and as leader of the New York city delegation was constantly active on the floor of the House.

In his last term he was the only Republican elected in his district and won despite great opposition directed against him personally.

Since 1912 Mr. Ward has been connected with the King Motor Car Company of Detroit, first as vice-president, and from 1916 as president. The company has been successful under his direction, and the King car has developed from a four cylinder automobile selling for \$1,095, to a high powered eight, costing over twice its original price.

EXCLUSIVENESS AIDS SALES.

Kiesel Distributor Says That's Why Kiesel's Go Fast.

"It has frequently been figured out by automotive manufacturers that at least one-half the drawing power of a new motor car must be derived from its design and exclusive lines. The other 50 per cent. in the motor and chassis construction, which must be built by the manufacturer who has the reputation for the very highest in mechanical development and perfection," says Sidney B. Bowman, New York distributor.

"The purchaser of to-day desires first of all a car that is a reminder to his friends and associates that he has ideas and ideals somewhat above the common, this difference being along lines that suggest exclusiveness combined with good taste and comfort combined with originality.

"The reason for this fact is based upon the desire of the motor car purchaser of to-day in possessing a desire for quality in the things he owns, and the more a motor car represents the work of the superlatively clever artisan, the better he is satisfied.

"In the new Kiesel custom built models, now having their first exhibition at the Grand Central Palace show, Kiesel's technical dexterity is so prominent that it is hard to believe that these custom built models do not carry with them the importer's tag."

HAVE RUGGED MECHANISM.

Haynes Cars as Dependable as They Are Handsome.

"Besides beauty there must be dependable power in a modern motor car," says R. M. How, general sales manager of the Haynes Automobile Company, Kokomo, Ind. "In order to get dependable power without wear and tear on the engine car, the mechanism must be rugged and able to withstand the continual service motor cars get nowadays."

Refinements in chassis construction are emphatically evident in the beautiful new Haynes cars, which are truly pattern cars because of their distinctive newness. The four door, four passenger roadster is a popular style because its seating arrangement invites sociability and companionship. The roadster is smart looking with the serviceable wire wheels.

NEW KOEHLER TRUCK LINE.

Improved Models Exhibited at the Show Here.

With the coming of a greatly increased demand for truck transportation and stricter requirements in the trucks that are to render this larger service the H. J. Koehler Motor Corporation of Newark, N. J., a pioneer in the manufacture of trucks, recently has reorganized its engineering and selling staffs and is giving the market a new line of Koehlers.

These new Koehlers, designed by C. D. Peterson, are on view at the New York Truck Show for the first time. Model "M," two and a half tons, is the result of several years of tests by Mr. Peterson, and the company estimates eight years of efficient service for this model as against the conventional five.

The engine, a 35 H. P. Koehler-Hercules, is described as an exceptionally fine unit. Specifications of the engine and other principal parts are: Zenith carburetor, Eisemann high tension magnet, Simplex "gridvalve" solid shaft driven governor, Brown-Lipe ten plate dry disk type clutch, Brown-Lipe four

Dorris Truck Is Sturdy.



speeds forward and reverse gear set, Spicer universal joints, Timken-David-Brown worn driven rear axle, Parth & Bingham frame, Koehler armored radiator, Mather chrome-vanadium steel springs, Lavine steering and Wayne wheels. The power plant has three point suspension.

LITTLE NASH VIBRATION.

Nash engineers have made the new Nash Four unusually free from vibration, according to those who are in a position to know. The door support being built permanently into the car assure a minimum of vibration to the body, and a well thought out, carefully balanced construction has made the motor practically without vibration at all.

TWO NEW GARFORD MODELS.

One and One-Quarter and Three and One-Half Trucks Added.

To meet more adequately a growing demand in certain transportation fields, the Garford Motor Truck Company in the last few months has introduced two new models, which already have attained places of leadership in the company's extensive line," says E. A. Williams, Jr., president.

"These new models are the one and one-quarter ton Garford and the three and one-half ton Garford.

"The former is designed to meet all the requirements of light hauling in the industrial, commercial and farm fields. It is particularly adapted to work on the farm.

"While virtually a one and one-quarter ton truck, this new Garford embraces the additional strength obtainable in a truck of one and one-half ton units. It has a one and one-half ton worm drive axle, one one and one-half ton frame and its transmission is of the one and one-half ton type. It is equipped with a four cylinder "L" head motor, 3 1/2 by 5 1/2 inches.

REPLACE WORN FABRIC.

This Is Necessary to Repair a Tire Successfully.

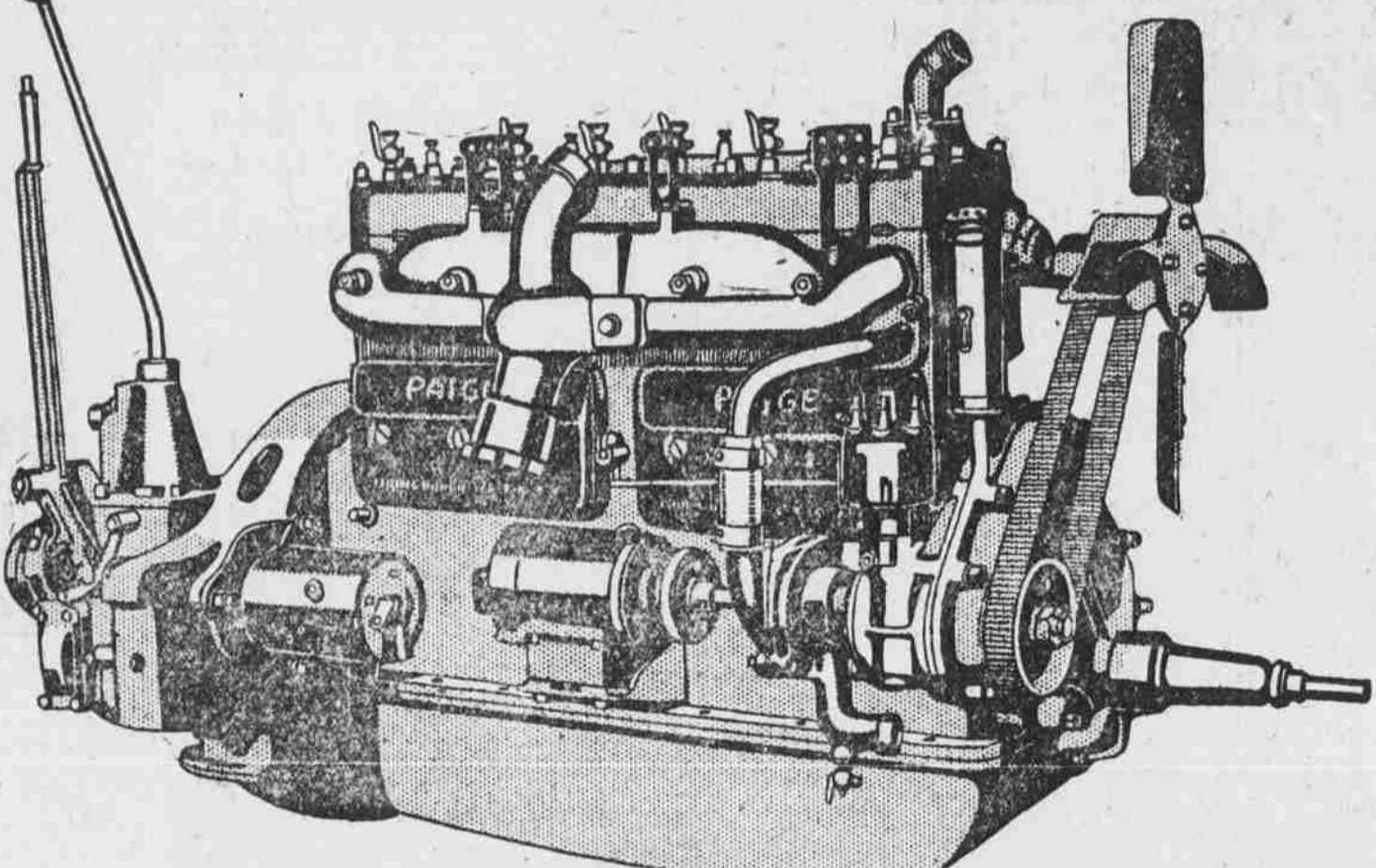
Can your worn or injured tire be successfully repaired?

To this vital question the answer experts of the B. F. Goodrich Rubber Company's tire repair school is "Yes." But if you asked these same experts whether the average tire is always of sufficient and successfully repaired the answer is immediately reversed.

Careless and unscientific repairing, the Goodrich company points out, is responsible for the loss of hundreds of thousands of dollars to American car owners each year. And to this should be added the loss incurred by neglected repairs—three thrown away whose life could have been prolonged.

What is the most frequent mistake made by repair men and how avoided? The company's experts' reply is: Failure to remove worn fabric from injured portion of tire and the practice of adding rather than replacing layers of fabric.

PAIGE The Most Beautiful Car in America



Announcing a New Paige Motor

For three years the Paige engineers have been devoting their efforts to the development of a New Six-cylinder motor. With every facility for research and experiment, these men have worked with one definite object in mind—the production of the most efficient power plant in the world.

That motor is now an accomplished fact. It has passed from the laboratory to the road and there it has been tested mercilessly and continuously. It has been subjected to every stress and strain that brutal driving might suggest, but in each instance it has emerged with a flawless record.

These long, exhaustive tests have convinced us that the new Paige Motor is indeed the most efficient of all light sixes. In

economy of operation, hill climbing ability, acceleration and flexibility it has far surpassed any power plant developed by this organization.

Best of all it is an original Paige product—conceived by Paige engineers and built by Paige mechanics in the Paige shops. In it we have incorporated every approved feature that is known to automotive engineering.

In brief, it represents the sum total of current engineering knowledge. It expresses accurately and completely the tremendous strides of scientific development during the entire war period. It is a strictly modern achievement—a product of the combined genius of two continents.

A New Paige Car

The war has taught American manufacturers many valuable lessons. In the past three years, for instance, we have developed an entirely new conception of precise manufacturing in large scale production.

You will find a striking example of this practice in the New Paige "Glenbrook" model.

The scrupulously accurate methods that were applied to delicate Government mechanisms are now producing every unit of our car.

With the closest inspection, vastly increased equipment and much broader experience, there could be only one result—a highly refined, highly standardized product.

One ride in the "Glenbrook" tells an eloquent story of finely-balanced construction. The smooth, even power of the motor sweeps you along without a suggestion of vibration or mechanical noise. There is merely a gentle purr from the exhaust as the car glides on its way with the buoyancy of an aeroplane.

All road shocks and jars are immediately absorbed in the velvety spring suspension.

There is no danger of sway or "side slip" no matter what the speed may be, for every ounce of weight in the chassis is distributed with scientific precision.

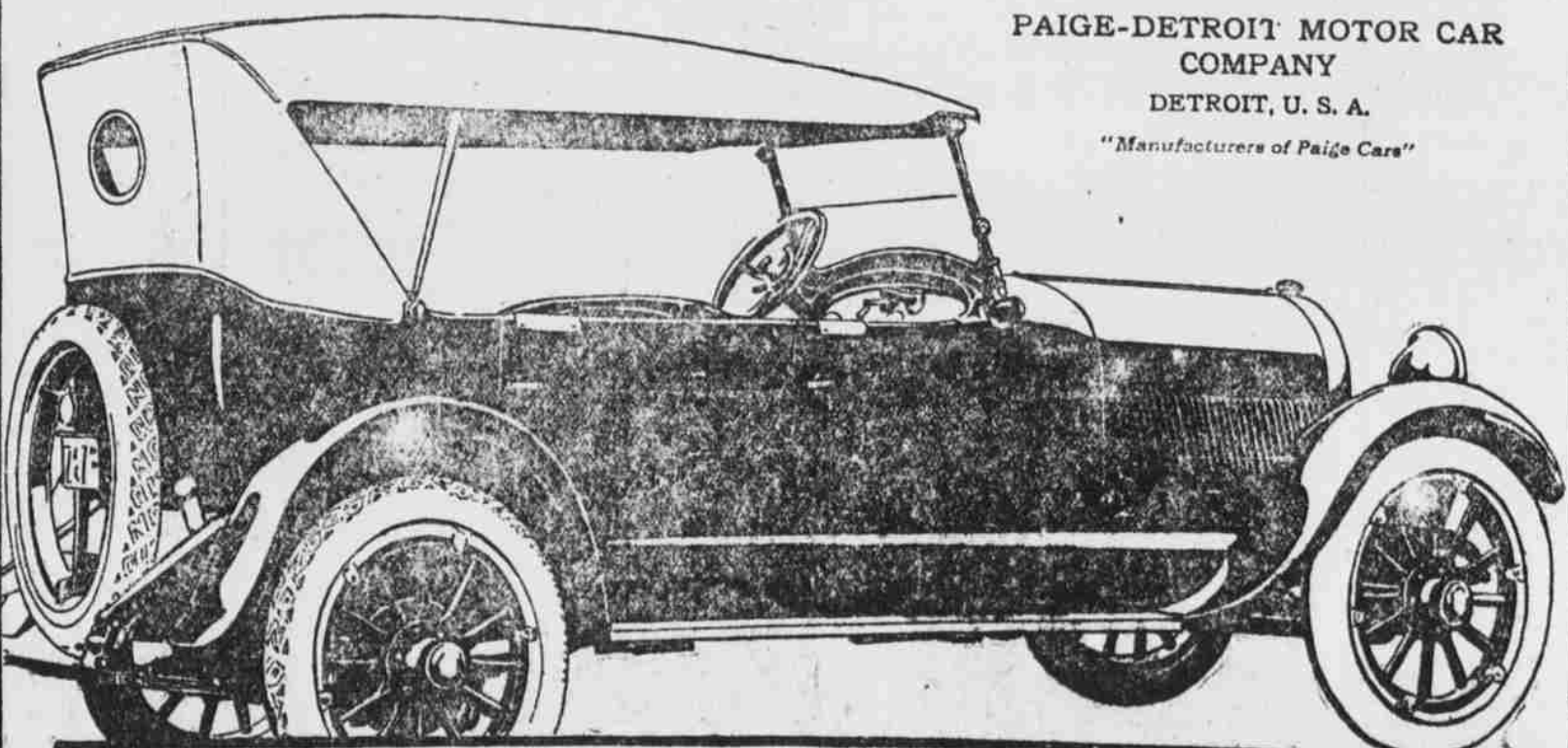
Inside the car there is body room, leg room and elbow room for five adult passengers to travel in luxurious comfort.

The upholstery is soft and inviting—the equipment and general appointments throughout are the best that money can buy.

So far as the design is concerned, you of course know what to expect, for this is "The Most Beautiful Car in America."

The "Glenbrook" model is our latest achievement. We merely ask you to see it—ride in it—drive it—and form your own opinion. We shall be quite content to abide by the result.

PAIGE-DETROIT MOTOR CAR COMPANY
DETROIT, U. S. A.
"Manufacturers of Paige Cars"



PAIGE-DETROIT CO. OF N. Y. Inc.

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